

CLASSIFICATION:

**UNCLASSIFIED**

<b>BUDGET ITEM JUSTIFICATION SHEET</b>								DATE:				
<b>P-40</b>								<b>February 2004</b>				
APPROPRIATION/BUDGET ACTIVITY <b>OTHER PROCUREMENT, NAVY/BA-1</b>							P-1 ITEM NOMENCLATURE <b>SUB. PERISCOPES &amp; IMAGING EQUIP./083100/05/H1PL</b>					
Program Element for Code B Items:							Other Related Program Elements <b>N/A</b>					
		ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
QUANTITY												
COST												
(In Millions)												
				<b>\$32.2</b>	<b>\$29.9</b>	<b>\$62.1</b>	<b>\$72.1</b>	<b>\$71.8</b>	<b>\$70.1</b>	<b>\$66.1</b>	<b>\$0.0</b>	<b>\$404.2</b>
SPARES COST												
(In Millions)												
												<b>\$0.0</b>
<p>The Submarine Periscope Program procures the Type 18 and Type 8 periscopes and new, improved imaging capabilities incorporated in the Integrated Submarine Imaging System (ISIS). Commander Naval Submarine Force (CNSF). Operations Review Group (ORG) selected the Patriot Type 18 Periscope Rangefinder and the Type 8 Infra-Red (IR) Periscope as high priority tactical control technologies to field. By OPNAV Ltr Ser. N77/3U629209, 12 June 2003, OPNAV N77 established the ISIS to rapidly field these systems and integrate existing periscope imagery systems into a single system for installation on board submarines. The ISIS baseline includes the Type 18 Periscope Patriot Rangefinder, the Type 8IR Periscope, the Submarine Common Imaging System (SCIS), and the Silent Watch ESM Upgrade. ISIS supports high intensity operations in the littoral, providing the submarine force with the tactical imaging systems necessary to safely and effectively employ its surveillance and weapons capabilities. The Infra-Red (IR) imaging capability improves imaging in low visibility conditions. The Electronic Warfare Support (ES) upgrade provides the LOS ANGELES Class submarine the ability to intercept, classify, and identify potential threat emitters using onboard ESM equipment when the Type 8 is the only mast raised. This capability allows for greater submarine stealth in the littoral. The Automated Range Finder provides a 360 degree search independent of the visual search, enhanced situational awareness and provides a collision avoidance capability. Tactical imagery technology insertion includes the Submarine Common Imagery System, an integrated imaging system that provides for remote periscope operation, operator alerts, imaging enhancement tools and contact analysis tools, interfaced with other Combat Systems. FY 2005, funding will improve submarine imaging capability in the areas of: ship safety, Intelligence, Surveillance and Reconnaissance (ISR), tactical control (contact management in the littorals) to provide high quality imaging 24 hours a day, 7 days a week in all weather conditions to support submarine operations worldwide. Along with the Type 18 and Type 8 Mod 3 Periscope Systems, ISIS will be installed on LOS ANGELES Class, SEAWOLF Class and SSGN submarines.</p> <p>ISIS provides for the modernization of imaging systems to improve imaging capabilities for the submarine force in support of ISR requirements. This includes the integration of new capabilities into the Type 18 and Type 8 Periscopes. The inventory objective is 62 units: This is the quantity required for ship installation (59), spares (2), and (1) configuration model.</p> <p>The Type 18 Periscope was approved for service use in 1972. The inventory objective is 72 units: This is the quantity required for ship installation (54), spares (14), trainers (3), and (1) configuration model.</p> <p>The Type 8 Mod 3 Periscope provides enhanced imaging and communications capabilities. The Type 8B Mod 3 Periscope replaces the Type 2 Periscope on LOS ANGELES Class Submarines. The Type 8B Mod 3 Periscope inventory objective is 63 units. This is the quantity required for ship installation (53), spares (7), trainers (1), Type 8 Mod 3 Infrared (IR) Pre-Production Model (1) and configuration control model (1).</p> <p>PL001 - Procurement of Type 8B Mod 3 Periscopes began in FY 1991. The Type 8B Mod 3 replaces the Type 2 Periscope on SSN-688 Class Submarines and provides them with enhanced imaging and communications capabilities. Installations will be accomplished during routine upkeep periods and shipyard availabilities.</p> <p>PL006 - Imaging components are required to fully support Type 18 digital imaging, photographic, television, ancillary equipments and upgrades, and the Type 8 Infra-red (IR) upgrade. Equipment includes IR, High Resolution Digital Cameras, imaging recording devices, Reliability &amp; Maintainability and obsolescence components and imaging equipment that must be replaced. These maintenance items support fleet requirements based on demand history, repair turn-around time, and casualties resulting from non-repairable equipment and ancillary components. This line is consolidated in PL011 in FY05.</p>												

P-1 SHOPPING LIST

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<b>P-40</b>		<b>February 2004</b>
<b>APPROPRIATION/BUDGET ACTIVITY</b>	<b>P-1 ITEM NOMENCLATURE</b>	
<b>OTHER PROCUREMENT, NAVY/BA-1</b>	<b>SUB. PERISCOPES &amp; IMAGING EQUIP./083100/05/H1PL</b>	
<p>PL011 - Imaging Block Upgrade - Funding continues procurement of Periscopes and Imaging Equipment reliability &amp; maintainability, obsolescence, and operational capability enhancement block upgrades (i.e.): Type 18 Radar Absorption System (RAS), Type 18I Improved antenna, Type 18 mast downrun upgrade, Type 18 low band signal distribution upgrade, Type 18 Submarine Imaging System (SUBIS), Type 18 heated head window replacement, periscope bearing upgrade, hoisting cylinder sleeve bearing upgrade, periscope fairing steady bearing, periscope fairing lower dashpot improvement, periscope fairing hoisting cylinder backup rings, periscope fairing upper Karon bearing, periscope fairing hoisting cylinder rod ceramic coating, periscope fairing closure cap seal, periscope universal hull packing improvement, periscope alternate cathodic protection, and periscope fairing hoisting cylinder installation fixture. Variable quantities and types are bought in each fiscal year.</p> <p>PL012 - Funds procure replacement Special Support Equipment (SSE) for each maintenance level to ensure systems are maintained in a state of operational readiness. Equipment includes Q-Band Test Equipment, Mast Dynamic Collimator, Eyebow/Mast Test Set, and Antenna/Outer Head Simulator required due to obsolescence and age of existing imaging systems SSE.</p> <p>PL015 - Funding is for Interim Contract Support provided by the periscope manufacturer including Depot and Intermediate level repair of all types of tactical submarine imaging systems.</p> <p>PL016 - Funding is for imaging systems training requirements to include curriculum development, training materials, initial factory training pilot course conduct, Navy Training Plans, and instructor advisory services.</p> <p>PL017 - Funding is for the procurement of Type 8 Mod 3 Infra-Red (IR) Periscope Upgrades beginning in FY-03. Funding provides for enhanced submarine safety through the ability to navigate and visually detect contacts at night and in light rain or fog. Tactically, the submarine will be able to perform continuous IR searches for targets, plumes and wakes, perform reconnaissance of coastlines, track and recover special forces, perform mine laying at night and provide correlation of IR images with EW emitters. This line is consolidated in PL022 in FY05.</p> <p>PL018 - Funding is for the procurement of an Automated Range Finder beginning in FY-03. Funding provides for an increased capability for the periscope to perform rapid determination of contact range without a prior knowledge of contact dimensions and without application of rules of thumb. The automated range finder will increase efficiency for contact management, reduce workload and eliminate operator fatigue during prolonged operations in dense contact environments.</p> <p>PL019 - Funding for the SIGINT - Type 8B/J ESM Upgrade was realigned in FY-03 based on CNO Sponsor N77 direction. Funds were redistributed to Cost Codes PL011, PL012 and PL015.</p> <p>PL020 - Funding is for tactical imagery technology insertion. Funding provides for a Submarine Common Imagery System. The imaging system will provide for remote periscope operation, operator alerts, imaging enhancement tools and contact analysis tools. This line is consolidated in PL022 in FY05</p> <p>PL021 - Funding is for the procurement of a SSGN ISIS Imaging System including NRE in FY-04. This line is consolidated in PL022 in FY05</p> <p>PL022- Funding is for the procurement of SSN ISIS Imaging Systems including NRE beginning in FY-05.</p>		

P-1 SHOPPING LIST

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<b>BUDGET ITEM JUSTIFICATION SHEET</b> <b>P-40</b>		DATE: <b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY <b>OTHER PROCUREMENT, NAVY/BA-1</b>	P-1 ITEM NOMENCLATURE <b>SUB. PERISCOPES &amp; IMAGING EQUIP./083100/05/H1PL</b>	
<p>PL830 - Production Engineering funds provide the following functions: value engineering; review and evaluation of production design data and documentation; production configuration control; maintenance engineering efforts designed and incorporated into the production manufacturing process, and other related engineering functions that are integral to all of the Imaging Systems and ancillary components.</p> <p>PL900 - Imaging Systems engineering, technical and maintenance services funds provide the following functions: In-Service engineering and technical support to deployed Periscope and Imaging Equipment, imaging system installation and integration planning, SHIPALT and TEMPALT technical data preparation, production hardware design review, engineering/technical support for installations, training materials development, field engineering and technical problem resolution, block upgrade installation planning, configuration management, and maintenance planning including inventory, management, repair, and restoration scheduling.</p> <p>PL5IN - Funding is for the installation of Fleet Modernization Program Equipment Only.</p> <p>PL6IN - Funding is for the installation of Non-Fleet Modernization Program Equipment only.</p> <p>Estimates include competitive sourcing savings associated with consolidation of production support contracting efforts.</p>		

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WEAPONS SYSTEM COST ANALYSIS P-5							Weapon System								DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1							ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD SUB. PERISCOPES & IMAGING EQUIP./083100/05/H1PL									
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS														
				FY 2002			FY 2003			FY 2004			FY 2005				
				Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost		
PL001	Type 8B Mod 3 Periscope (SSN)	A							0			0			0		
PL006	Type 18 and Type 8 Imaging Components	A							492			0			0		
PL011	Imaging Block Upgrade	A							12,804			5,269			1,768		
PL012	Periscope Special Support Equipment	A							505			332			440		
PL015	Periscope Interim Contractor Support	A							1,117			895			1,115		
PL016	Periscope Training	A							142			144			147		
PL017	Type 8 Mod 3 IR Periscope Upgrade	A						3	1,615	4,846		0			0		
PL018	Automated Range Finder	A						4	1,426	5,705	4	1,186	4,745	12	900	10,800	
PL019	SIGINT - Type 8B/J ESM Upgrade	A							0			0			0		
PL020	Submarine Common Imagery System	A							0			0			0		
PL021	SSGN Imaging System	A							0	1	11,851	11,851			0		
PL022	Integrated Submarine Imaging System (ISIS)	A							0			0	9	4,433	39,900		
SUB-TOTAL - PROCUREMENT			0			0			25,611			23,236			54,170		

DD FORM 2446, JUN 86

P-1 SHOPPING LIST  
ITEM NO. 6

PAGE NO.

4

CLASSIFICATION:

**UNCLASSIFIED**

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**UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System									DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: SHIP SUPPORT EQUIPMENT						ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD SUB. PERISCOPES & IMAGING EQUIP./083100/05/H1PL									
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS													
			FY 2002			FY 2003			FY 2004			FY 2005				
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
PL830	Periscope Production Engineering	A							2,357			1,658			2,876	
PL900	Periscope Consulting Services - CSS	A							513			506			538	
	TOTAL PROCUREMENT								28,481			25,400			57,584	
PL5IN	Periscope FMP Installation	A							3,114			2,938			2,774	
	Periscope FMP Installation - DSA	A							386			734			693	
PL6IN	Periscope Non FMP Installation (ORDALT)	A							172			795			999	
	TOTAL INSTALLATION					0			3,672			4,467			4,466	
GRAND TOTAL			0			0			32,153			29,867			62,050	

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE February 2004			
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1 SHIP SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE SUB. PERISCOPES & IMAGING EQUIP./083100/05/H1PL				SUBHEAD H1PL	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
<b><u>FY 2003</u></b> <b>PL017</b> Type 8 IR Periscope Upgrade	3	\$1,615	NUWC, Newport	9/02	O/FP	Kollmorgen Northampton, MA.	7/03	1/05	YES	N/A
<b>PL018</b> Automated Range Finder	4	\$1,426	NAWC, China Lake	9/02	C/FP	Various	4/03	10/04	YES	N/A
<b><u>FY 2004</u></b> <b>PL018</b> Automated Range Finder	4	\$1,186	NAWC, China Lake	9/03	C/FP	Various	4/04	10/05	YES	N/A
<b>PL021</b> SSGN Imaging System Mast	1	\$11,851	NAVSEA, Wash, DC	9/03	O/FP	Kollmorgen Northampton, MA.	4/04	4/06	YES	N/A
<b><u>FY 2005</u></b> <b>PL018</b> Automated Range Finder	12	\$900	NAWC, China Lake	9/04	C/FP	Various	4/05	10/06	YES	N/A
<b>PL022</b> Integrated Submarine Imaging System (ISIS)	9	\$4,433	NAVSEA, Wash, DC	9/04	C/FP	TBD	5/05	11/06	YES	N/A
D. REMARKS										

CLASSIFICATION: **UNCLASSIFIED**

Feb 2004

P3A

**INDIVIDUAL MODIFICATION**MODELS OF SYSTEM AFFECTED: Type 8 PeriscopeTYPE MODIFICATION: ShipaltMODIFICATION TITLE: Type 8B Mod 3/PL001

## DESCRIPTION/JUSTIFICATION:

Provides EHF Satellite Communications (SATCOM)

## DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 2002 & Prior		FY		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (IN MILLIONS)</u>																						
<u>RDT&amp;E</u>																					0	0.0
<u>PROCUREMENT</u>																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT	48	74.3																			48	74.3
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT*	1	2.7																			1	2.7
SUPPORT EQUIPMENT (CCM)	1	1.1																			1	1.1
OTHER: TRIDENT PAYBACKS	5	5.3																			5	5.3
OTHER: SPARES	7	8.1																			7	8.1
OTHER: T8 MOD 3 IR PREPROD MODEL	1	5.5																			1	5.5
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST		16.4				1.6		1.2		1.2												20.4
TOTAL PROCUREMENT	63	113.4				1.6		1.2		1.2											63	117.4

CLASSIFICATION: UNCLASSIFIED

Feb 2004

P3A (Continued)

## INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: Type 8 Periscope MODIFICATION TITLE: Type 8B Mod 3/PL001

## INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AITsADMINISTRATIVE LEADTIME: 6 MonthsPRODUCTION LEADTIME: 14 MonthsCONTRACT DATES: FY 2002: Mar-02FY 2003: N/AFY 2004: N/AFY 2005: N/ADELIVERY DATE: FY 2002: May-03FY 2003: N/AFY 2004: N/AFY 2005: N/A

(\$ in Millions)

Cost:	FY2002 & Prior		FY		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
FY 2002 & PRIOR	40	16.4			4	1.6	2	1.2	2	1.2											48	20.4
FY																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																					0	0.0
FY 2006 EQUIPMENT																					0	0.0
FY 2007 EQUIPMENT																					0	0.0
FY 2008 EQUIPMENT																					0	0.0
FY 2009 EQUIPMENT																					0	0.0
TO COMPLETE																						

## INSTALLATION SCHEDULE:

	FY 2002 & Prior	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	40	0	1	1	2	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
Out	40	0	1	1	2	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48

P-3A

ITEM

6

PAGE 10

CLASSIFICATION: UNCLASSIFIED



<div style="display: flex; justify-content: space-between;"> <span>P3A</span> <span>INDIVIDUAL MODIFICATION</span> </div>																						
MODELS OF SYSTEM AFFECTED: <u>Type 18B Periscope</u>				TYPE MODIFICATION: <u>Shipalt</u>				MODIFICATION TITLE: <u>Sub Imaging System (SUBIS) PL011</u>														
DESCRIPTION/JUSTIFICATION: <div style="border: 1px solid black; height: 60px; margin-top: 5px;"></div>																						
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____																						
	FY 2002 & Prior		FY		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (IN MILLIONS)</u>																						
<u>RDT&amp;E</u>																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT (CCM &SS)																						
OTHER SPARES																						
OTHER TEMPALT																						
OTHER: CATASTROPHIC LOSS																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST																						
TOTAL PROCUREMENT																						

## P3 INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: Type 18B Periscope MODIFICATION TITLE: Sub Imaging System (SUBIS)/PL011

## INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AITsADMINISTRATIVE LEADTIME: 6 MonthsPRODUCTION LEADTIME: 6 MonthsCONTRACT DATES: FY 2002: Jun-02FY 2003: Apr-03FY 2004: Apr-04FY 2005: N/ADELIVERY DATE: FY 2002: Dec-02FY 2003: Oct-03FY 2004: Oct-04FY 2005: N/A

(\$ in Millions)

Cost:	FY2002 & Prior		FY		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
FY 2002 & PRIOR	20	2.1			12	1.9	7	1.3													39	5.2
FY																					0	0.0
FY 2003 EQUIPMENT							7	1.3	5	0.9											12	2.2
FY 2004 EQUIPMENT									3	0.6											3	0.6
FY 2005 EQUIPMENT																					0	0.0
FY 2006 EQUIPMENT																					0	0.0
FY 2007 EQUIPMENT																					0	0.0
FY 2008 EQUIPMENT																					0	0.0
FY 2009 EQUIPMENT																					0	0.0
TO COMPLETE																						

## INSTALLATION SCHEDULE:

	FY 2002 & Prior	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	20	0	4	4	4	2	4	4	4	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
Out	20	0	4	4	4	2	4	4	4	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54

P-3A

P3A

## INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: Submarine Periscopes & Imaging Equip.TYPE MODIFICATION: OrdaltsMODIFICATION TITLE: Imaging Block Upgrade/PL011

## DESCRIPTION/JUSTIFICATION:

Provides obsolescence related upgrades and technology refresh for the Submarine Periscopes.

## DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 2002 & Prior		FY		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (IN MILLIONS)</u>																						
<u>RDT&amp;E</u>																					0	0.0
<u>PROCUREMENT</u>																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT	1478	25.9			25	8.0	65	3.8	29	1.8	23	1.0	49	2.4	95	5.2	59	3.3			1823	51.3
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT*																					0	0.0
SUPPORT EQUIPMENT (CCM & SS)																					0	0.0
OTHER LBU/GFE)																					0	0.0
OTHER																					0	0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST		12.7				0.2		0.8		1.0		0.4		1.4		0.1		0.8		0.5		17.8
TOTAL PROCUREMENT	1478	38.6	0	0.0	25	8.2	65	4.6	29	2.8	23	1.4	49	3.8	95	5.3	59	4.0			1823	69.1

P3A (Continued)

## INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: Sub. Periscopes & Imaging Equip.MODIFICATION TITLE: Imaging Block Upgrade/PL011

## INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AITsADMINISTRATIVE LEADTIME: 6 MonthsPRODUCTION LEADTIME: 12 MonthsCONTRACT DATES: FY 2002: Apr-02FY 2003: Apr-03FY 2004: Apr-04FY 2005: Apr-05DELIVERY DATE: FY 2002: Apr-03FY 2003: Apr-04FY 2004: Apr-05FY 2005: Apr-06

(\$ in Millions)

Cost:	FY2002 & Prior		FY		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
FY 2002 & PRIOR	1474	12.7			4	0.2															1478	12.9
FY																					0	0.0
FY 2003 EQUIPMENT							25	0.8													25	0.8
FY 2004 EQUIPMENT									65	1.0											65	1.0
FY 2005 EQUIPMENT											29	0.4									29	0.4
FY 2006 EQUIPMENT													23	1.4							23	1.4
FY 2007 EQUIPMENT															49	0.1					49	0.1
FY 2008 EQUIPMENT																	95	0.8			95	0.8
FY 2009 EQUIPMENT																			59	0.5	59	0.5
TO COMPLETE																						

## INSTALLATION SCHEDULE:

	FY 2002 & Prior	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				IC	TOTAL
In	1474	0	0	2	2	0	9	8	8	0	22	22	21	0	9	10	10	0	7	8	8	0	16	16	17	0	31	32	32	59	1823
Out	1474	0	0	2	2	0	9	8	8	0	22	22	21	0	9	10	10	0	7	8	8	0	16	16	17	0	31	32	32	59	1823

P-3A

CLASSIFICATION: UNCLASSIFIED

Feb 2004

P3A

## INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: Type 18 PeriscopeTYPE MODIFICATION: ShipaltMODIFICATION TITLE: Automatic Range Finder  
PL018

## DESCRIPTION/JUSTIFICATION:

Provides increased capability to perform rapid determination of contact range without a prior knowledge of contact dimensions and without application of rules of thumb.

## DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 2002 & Prior		FY		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (IN MILLIONS)</u>																						
<u>RDT&amp;E</u>																					0	0.0
<u>PROCUREMENT</u>																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT							4	4.7	12	10.8	6	5.5									22	21.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																					0	0.0
SUPPORT EQUIPMENT (CCM)					1	1.4															1	1.4
OTHER SPARES																					0	0.0
OTHER TEMPALT																					0	0.0
OTHER: PRE-PRODUCTION MODEL					1	1.4															1	1.4
OTHER: GOV. FURNISHED EQUIP. (GFE)					2	2.9															2	2.9
INSTALL COST										0.8		2.5		1.3								4.6
TOTAL PROCUREMENT	0	0.0	0	0.0	4	5.7	4	4.7	12	11.6	6	8.0	0	1.3	0	0.0	0	0.0	0	0.0	26	31.3

CLASSIFICATION: **UNCLASSIFIED**

Feb 2004

P3A (Continued)

**INDIVIDUAL MODIFICATION (Continued)**MODELS OF SYSTEMS AFFECTED: Type 18 PeriscopeMODIFICATION TITLE: Automatic Range Finder/PL018

## INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AITsADMINISTRATIVE LEADTIME: 6 MonthsPRODUCTION LEADTIME: 18 MonthsCONTRACT DATES: FY 2002: N/AFY 2003: Apr-03FY 2004: Apr-04FY 2005: Apr-05DELIVERY DATE: FY 2002: N/AFY 2003: Oct-04FY 2004: Oct-05FY 2005: Oct-06

(\$ in Millions)

Cost:	FY2002 & Prior		FY		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
FY 2002 & PRIOR																					0	0.0
FY																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT									4	0.8											4	0.8
FY 2005 EQUIPMENT											12	2.5									12	2.5
FY 2006 EQUIPMENT													6	1.3							6	1.3
FY 2007 EQUIPMENT																					0	0.0
FY 2008 EQUIPMENT																					0	0.0
FY 2009 EQUIPMENT																					0	0.0
TO COMPLETE																					0	0.0

## INSTALLATION SCHEDULE:

		FY 2002 & Prior	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				TC	TOTAL
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In		0	0	0	0	0	0	0	0	0	0	0	2	2	3	3	3	3	2	2	2	0	0	0	0	0	0	0	0	0	0	22
Out		0	0	0	0	0	0	0	0	0	0	0	2	2	3	3	3	3	2	2	2	0	0	0	0	0	0	0	0	0	22	

P-3A

ITEM

6

PAGE 16

CLASSIFICATION: **UNCLASSIFIED**

CLASSIFICATION: UNCLASSIFIED

Feb 2004

P3A

## INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: ISISTYPE MODIFICATION: ShipaltMODIFICATION TITLE: SSGN Imaging System/PL021

## DESCRIPTION/JUSTIFICATION:

Provides for the modernization of the SSGN imaging systems to improve imaging capabilities for the submarine force in support of ISR requirements.

## DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 2002 & Prior		FY		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (IN MILLIONS)</u>																						
<u>RDT&amp;E</u>																					0	0.0
<u>PROCUREMENT</u>																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT							1	11.9													1	11.9
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT*																					0	0.0
SUPPORT EQUIPMENT (CCM &SS)																					0	0.0
OTHER SPARES																					0	0.0
OTHER																					0	0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST											1.7											1.7
TOTAL PROCUREMENT	0	0.0	0	0.0	0	0.0	1	11.9	0	0.0	0	1.7	0	0.0	0	0.0	0	0.0	0	0.0	1	13.5

P3A (Continued)

## INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: ISISMODIFICATION TITLE: SSGN Imaging System/PL021

## INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AITsADMINISTRATIVE LEADTIME: 6 MonthsPRODUCTION LEADTIME: 24 months for first shipset.CONTRACT DATES: FY 2002: N/AFY 2003: N/AFY 2004: Apr-04FY 2005: N/ADELIVERY DATE: FY 2002: N/AFY 2003: N/AFY 2004: Apr-06FY 2005: N/A

(\$ in Millions)

Cost:	FY2002 & Prior		FY		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		T C		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
FY 2002 & PRIOR																					0	0.0
FY																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT											1	1.7									1	1.7
FY 2005 EQUIPMENT																					0	0.0
FY 2006 EQUIPMENT																					0	0.0
FY 2007 EQUIPMENT																					0	0.0
FY 2008 EQUIPMENT																					0	0.0
FY 2009 EQUIPMENT																					0	0.0
TO COMPLETE																						

## INSTALLATION SCHEDULE:

	FY 2002 & Prior	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				TC	TOTAL
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

P-3A



P3A

## INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: Type 8 and Type 18 Periscopes TYPE MODIFICATION: ShipaltMODIFICATION TITLE: Integrated Sub. Imaging System (ISIS)  
PL022

## DESCRIPTION/JUSTIFICATION:

Provides for the modernization of the SSN imaging systems to improve imaging capabilities for the submarine force in support of ISR requirements.

## DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 2002 & Prior		FY		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (IN MILLIONS)</u>																						
<u>RDT&amp;E</u>																					0	0.0
<u>PROCUREMENT</u>																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT									9	39.9	11	51.2	12	51.8	12	47.2	12	45.1	2	11.3	58	246.5
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																					0	0.0
SUPPORT EQUIPMENT (CCM &SS)																		1	3.8		1	3.8
OTHER SPARES											1	4.7						1	3.8		2	8.5
OTHER TEMPALT																					0	0.0
OTHER: PRE-PRODUCTION MODEL																					0	0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST													6.1		5.7		4.6		10.5			27.0
TOTAL PROCUREMENT	0	0.0	0	0.0	0	0.0	0	0.0	9	39.9	12	55.9	12	57.9	12	52.9	12	49.7	4	29.4	61	285.7

P3A (Continued)

## INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: Type 8 and Type 18 Periscopes MODIFICATION TITLE: Integrated Sub. Imaging System (ISIS)/PL022

## INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AITsADMINISTRATIVE LEADTIME: 6 MonthsPRODUCTION LEADTIME: 14 MonthsCONTRACT DATES: FY 2002: N/AFY 2003: N/AFY 2004: N/AFY 2005: May-05DELIVERY DATE: FY 2002: N/AFY 2003: N/AFY 2004: N/AFY 2005: Nov-06

(\$ in Millions)

Cost:	FY2002 & Prior		FY		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
FY 2002 & PRIOR																					0	0.0
FY																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT													9	6.1							9	6.1
FY 2006 EQUIPMENT															11	5.7					11	5.7
FY 2007 EQUIPMENT																	12	4.6			12	4.6
FY 2008 EQUIPMENT																			12	4.9	12	4.9
FY 2009 EQUIPMENT																			12	4.9	12	4.9
TO COMPLETE																			2	0.8	2	0.8

## INSTALLATION SCHEDULE:

	FY 2002 & Prior	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				TC	TOTAL
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	2	0	3	4	2	2	3	3	3	3	26	58
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	2	0	3	4	2	2	3	3	3	3	26	58

P-3A